

METHOD AND APPARATUS FOR CLOSING SEPTAL DEFECTS

ABSTRACT

Septal defect occluders are disclosed which can be used with a catheter deployment system to occlude a septal defect. The septal defect occluders of the present invention comprise a metallic frame structure that supports a biodegradable member. The frame structure is made from a shape memory metal such as Nitinol. The frame forms two opposing umbrella or disc shaped halves that are connected via a central region. The biodegradable member is attached to the umbrella or disc shaped halves and can be any of numerous biodegradable materials and is preferably a co-polymer of glycolide and lactide. This material initially forms a barrier to blood flow that occludes the defect. Over time, this material is replaced by the body with scar tissue formation and endothelial cells. The metal frame is left coated with the body's own material that blocks the defect.